

Notice of Allowability	Application No.	Applicant(s)	
	10/735,302	KRICHTAFOVITCH, IGOR A.	
	Examiner	Art Unit	
	Tuyet Vo	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/10/2005.
2. ☒ The allowed claim(s) is/are 1-26 and 28-46.
3. ☒ The drawings filed on 15 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

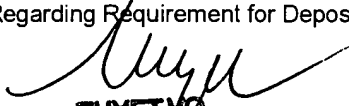
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>2/11/04 & 12/01/04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


TUYET VO
PRIMARY EXAMINER

DETAIL ACTION

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael Strauss on May 10, 2005.

The application has been amended as following:

In the claim, cancel claims 27 and 47;

claim 32, line 2, delete "and" and insert --an-- before
"alternating"; and

line 3, insert --- after "level".

The above noted amendment has been added in order to correct a typographical error in claim language.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-26 and 28-46 are drawn to relationship of ripple levels of voltage and a current supplied between corona discharge electrode and one collector electrode, classified in class 361, subclass 225.

II. Claims 27 and 47 are drawn to relationship between mean voltage/current and a root mean square voltage/voltage classified in class 361, subclass 235.

These inventions above are distinct from the other because of the following reasons:

Group I comprising claims 1-26 and 28-46 discloses a voltage/current supplied to the related electrodes under a condition, wherein the condition bases on each single

value that shows a relationship between a ripple level and a constant level of voltage/current while the group II comprising claims 27 and 47 define the value of voltage/current supplied to the related electrodes based upon a complex value that results of an average of sum of a number of voltage/current (V_{MEAN} , I_{MEAN}).

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Strauss on May 10, 2005 a provisional election was made without traverse to prosecute the invention of group I, claims 1-26 and 28-46. Accordingly, claims 27 and 47 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Reasons For Allowance

3. Claims 1-26 and 28-46 are allowed.
4. The following is an examiner's statement of reasons for allowance: the prior art of record fails to disclose a corona discharge device and method as well for accelerating a fluid by including at least one corona discharge electrode and at least one collector electrode, and an electric power supply connected to said corona discharge and collector electrodes to supply an electric power signal by applying a voltage V_t between said electrodes so as to cause a corona current I_t to flow between said corona discharge and collector electrodes, both said voltage V_t and corona current I_t each being a sum of respective constant d.c. and alternating a.c. components superimposed on each other whereby $V_t = V \text{ d.c.} + V \text{ a.c.}$ and $I_t = I \text{ d.c.} + I \text{ a.c.}$, wherein $V \text{ d.c.}$, $V \text{ a.c.}$, $I \text{ d.c.}$ and $I \text{ a.c.}$ show relationships that require in claims 1, 25, 26, 28, 45 and 46.
5. The remaining dependent claims are allowable for at least above reason.
6. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Benwood et al. (US Pat. 5,642,254) discloses high duty cycle AC corona charger. None of cited/recorded prior arts stands alone or combination with others discloses all limitation required in claim invention.

Art Unit: 2821

Correspondence

Any comments considered necessarily by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding assigned is 703 872 9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

A handwritten signature in black ink, appearing to read 'Tuyet Vo', is written over a horizontal line.

Primary Examiner

May 12, 2005